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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,131	01/30/2002	John M. White	AMAT/6148/DISPLAY/AKT/BG	3348

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EXAMINER	
TRAN, CHUC	

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/066,131	WHITE ET AL.	
	Examiner	Art Unit	
	Chuc D Tran	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-9,11-29,31-39,41-48 and 50-79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-9,11-29,31-39,41-48 and 50-79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/9/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

Applicant's arguments filed 12/19/03 have been fully considered but they are not persuasive. Applicants argue that the patent by Hanawa et al. does not teach a first plasma shaping apparatus and the second plasma apparatus comprising at least one of magnet for adjusting the shape of the plasma shaping apparatus. The Examiner respectfully disagrees. The Hanawa et al. clearly disclose a first plasma shaping apparatus and the second plasma apparatus (Col. 13, Line 60) comprising at least one of magnet (1870) (Col. 13, Line 27) for adjusting the geometry (via. shape) of the plasma shaping apparatus (Col. 13, Line 48). Applicants also argue that Havana does not address how to deliver reactive species into a large area chamber, maintain plasma uniformity over the large area of flat panel displays, solar panels and like. However, these limitations are not recited in the claims. Applicants are reminded that it has been held that limitations from the specification will not be imported or read into the claims. ***In re Priest,*** 582 F.2d 33, 37, 199 USPQ 11,15 (CCPA 1978).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3, 7-8, 12, 18, 20, 36, 54-57, 61, 71-79 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter "first plasma source, second plasma source" (in claims 1-3, 7-8, 12, 18, 20, 71, 73), "movable portion" (in claims 1 and 36), "cross sectional area of the central portion of the opening is wider, narrower than the

cross sectional are of the outer portions of the opening" (in claims 76-77), "narrow center cross sectional area forces the plasma to flow through the outer cross sectional area of the opening" (in claim 78), "a central portion" (in claim 79), "cross sectional area" (in claim 18) and "second gas" (in claims 54-57 and 61) which were not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Objections

4. Claims 52 and 79 are objected to because of the following informalities:

Claim 52, line 1, the method of claim.....???.;

Claim 79, line 8, "the" (cross sectional) change to - - a - -;

Claim 79, line 8, "the" (cross sectional) change to - - a - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-9, 11-70 are rejected under 35 U.S.C. 102(e) as being anticipated by Hanawa et al (USP. 6,348,126).

Regarding claim 1, Hanawa disclose an apparatus for substrate processing comprising:

- a chamber body (100)comprising a top, bottom (Fig. 1);
- a first plasma source (150-1) disposed on the chamber (100) (Fig. 17A) and defining a first plasma current path (Col. 12, line 55);

- a second plasma source (150-2) disposed on the chamber (100) (Fig. 17A) and defining a plasma path (Col. 12, line 55);

- a first plasma shaping apparatus (150-1) disposed adjacent the first plasma current path (Col. 5, Line 63);

Regarding claim 2, Hanawa disclose that a hollow member and the first plasma shaping apparatus is disposed at one end of the hollow member (Col. 5, Line 21).

Regarding claim 3, Hanawa disclose that the first plasma source (150-1) comprises a pair of outlets (181) wherein each outlet is registered with respective openings formed in opposing sides of the body (Fig. 17A) (Col. 12, Line 36-60).

Regarding claim 4, Hanawa disclose that a substrate support member having a substrate receiving surface and wherein the respective openings in the opposing sides of the body are at least as wide as the substrate receiving surface (Fig. 17A).

Regarding claim 5, Hanawa disclose that a showerhead (210) connected to the top and in facing relationship with the substrate receiving surface and wherein the respective openings in the opposing sides of the body are disposed between the showerhead and the substrate receiving surface (Fig. 2) (Col. 8, Line 17).

Regarding claim 7, Hanawa disclose that the first and second plasma sources each define an outlet at each of their respective ends and wherein the outlets of the first plasma source are registered with respective openings formed in a first pair of opposing sides of the body and the outlets of the second plasma source are registered with respective openings formed in a second pair of opposing sides of the body (Fig. 17A).

Regarding claim 8, Hanawa disclose that the first and second plasma sources each comprise: a hollow member, wherein each hollow member defines at least a portion of the respective first and second plasma paths therein (Col. 12, Line 36) (See Abstract).

Regarding claim 9, Hanawa disclose that a coil disposed proximate each of the hollow members and adapted to produce a magnetic field therein (Col. 12, Line 37).

Regarding claim 11, Hanawa disclose that wherein each of the plasma shaping apparatuses are disposed at an outlet of the respective hollow member (Fig. 17A).

Regarding claim 12, Hanawa disclose that the first plasma source comprises: a hollow member defining at least a portion of the first plasma current path therein (Col. 12, Line 9);

- a plenum (220) coupled to each end of the member, wherein each plenum is registered with a respective opening formed in the body (Col. 8, Line 18).

Regarding claim 13 Hanawa disclose that the hollow member linearly traverses the top of the chamber at about a midsection thereof (Fig. 17A).

Regarding claim 14, Hanawa disclose that the hollow member comprises at least a short transverse section of insulating member adapted to prevent the formation of a closed electrical path on the hollow member in about a longitudinal direction (Fig. 17A)

Regarding claim15, Hanawa disclose that a first antenna disposed over the top and adapted to inductively couple energy into the first plasma current path defined within at least a portion of the hollow member (Col. 12, Line 37).

Regarding claim 16, Hanawa disclose that the antenna is a coil wound about at least one axis generally orthogonal to the first plasma current path (Col. 12, Line 35) (Fig. 17A).

Regarding claim 17, Hanawa disclose an apparatus for substrate processing comprising:

- first plasma shaping apparatus is configured to be changed with one or more plasma shaping apparatus each defining a different geometric plasma shaping opening (Fig. 27, 17A).

Regarding claim 18, Hanawa disclose an apparatus for substrate processing, comprising:

- first plasma shaping apparatus defines a plasma shape opening registered with an outlet of the first plasma source and wherein the plasma shape opening defines at least a first portion and a

second portion, wherein the crosssectional area of the first portion is different than the cross sectional area of the second portion (Col. 12, Line 36) (Fig. 17A).

Regarding claim 19, Hanawa disclose that the plasma shaping apparatus comprises a length and width dimension that is greater than the depth dimension (Fig. 27).

Regarding claim 20, Hanawa disclose that the opening is sized about the same width and height as the outlet of the first plasma source and wherein the plasma shape opening define at least two outer portions and at least one inner portion, wherein the at least two outer portions are smaller than the at least one inner portion (Fig. 27).

Regarding claim 21 Hanawa disclose an apparatus for substrate processing, comprising:

- first plasma shaping apparatus is a magnetic plasma shaping apparatus that provides a magnetic plasma shape opening within the first plasma path (Col. 6, line 12).

Regarding claim 22, Hanawa disclose that the magnetic plasma shaping apparatus comprises at least one magnetic element (Col. 6, Line 12).

Regarding claim 23, Hanawa disclose that the at least one magnetic element comprises at least one of magnets, permanent magnets, electromagnets, and combinations thereof (Col. 6, Line 13).

Regarding claim 24, Hanawa disclose that the magnetic plasma :shaping apparatus position is adjustable relative to the plasma (Col. 3, Line 54).

Regarding claim 25, Hanawa disclose that the position of the magnetic element is adjustable relative to the plasma (Col. 3, Line 54).

Regarding claim 26, Hanawa disclose a plasma generating system, comprising:

- a first hollow member defining a first plasma current path (Col. 12, Line 36);
- a second hollow member defining a second plasma current path and disposed about orthogonal with respect to the first hollow member (Col. 12, Line 36) (Fig. 27);
- a first plasma shaping apparatus disposed at one end of the first hollow member (Fig.

17A); and

- a second plasma shaping apparatus disposed at one end of the second hollow member (Fig. 17A), wherein the first and second plasma shaping apparatus (Col. 13, Line 60) (Fig. 24) comprising at least one of magnet (1870) (Fig. 24) (Col. 13, Line 27).

Regarding claim 27, Hanawa disclose that the first and second hollow members are made from a material selected from the group consisting of aluminum, anodized aluminum, stainless steel, ceramic, glass, and combinations thereof (Col. 5, line 45).

Regarding claim 28, Hanawa disclose that the first and second hollow members each have a gas inlet (Col. 5, Line 60).

Regarding claim 29, Hanawa disclose that the first pair of plasma shaping apparatus define a first axis and the second plasma shaping apparatus defines a second axis substantially orthogonal with respect to the first axis (Fig. 17A).

Regarding claim 31, Hanawa disclose that the first and second plasma shaping apparatuses define an opening having a width at least equal to a substrate to be processed within a region between the openings defined by the first and second plasma shaping apparatus (Fig. 24).

Regarding claim 32, Hanawa disclose that a substrate support member and a bias RF source coupled to the substrate support member (Col. 5, Line 43).

Regarding claim 33, Hanawa disclose that a showerhead and a showerhead RF source coupled to the showerhead (Col. 8, Line 64) (Col. 9, Line 1).

Regarding claim 34, Hanawa disclose that the first and second pair of plasma shaping apparatuses each define a plasma shape opening defining a desired plasma density profile therethrough (Col. 11, line 24).

Regarding claim 35, Hanawa disclose that each plasma shape opening defines at least two plasma shaping regions having different geornetries from one another (Fig. 27).

Regarding claim 36, Hanawa disclose a plasma shaping apparatus, comprising:

- a body including an inner surface defining an opening to allow plasma therethrough; and
- a movable portion for changing the shape of the opening (Col. 5, Line 26).

Regarding claim 37, Hanawa disclose that an outer vacuum chamber mating surface adapted to mate with a vacuum chamber surface, and a plasma source coupling face adapted to be coupled to a plasma source (Fig. 1) (Col. 4, Line 63).

Regarding claim 38, Hanawa disclose that an inner face adapted to communicate with a processing region of a vacuum chamber defining the vacuum chamber surface (Fig. 1).

Regarding claim 39, Hanawa disclose that the body is replaceable with one or more other plasma shaping apparatuses each having an opening with a different cross-sectional geometry (Fig. 17A).

Regarding claim 41, Hanawa disclose that at least one magnetic element defining the inner surface to provide at least one magnetic field to form the opening therein (Col. 15, line 8).

Regarding claim 42, Hanawa disclose that the at least one magnetic element comprises electromagnets, permanent magnets, and combinations thereof (Col. 5, Line 45).

Regarding claim 43, Hanawa disclose that the opening is defined by at least one magnetic field wherein the at least one magnetic field is; adjusted to define the magnetic opening generally orthogonal to and within the plasma current flow (Col. 12, Line 36).

Regarding claim 44, Hanawa disclose that the at least one magnetic element is defined by a first magnetic element disposed adjacent to and juxtaposed a second magnetic element, wherein the magnetic fields generated by the first and second magnetic elements define the at least one magnetic opening (Col. 12, Line 46) (Fig. 17A).

Regarding claim 45, Hanawa disclose a method of substrate processing, comprising:

-flowing a first gas into a first plasma current path defined by a first hollow member located external to a processing region (Col. 10, Line 22);

- applying power to a first antenna adjacent the first hollow member to inductively couple energy into the first gas to form a first plasma current generating a first plasma from the first gas (Col. 10, Line 30) (Col. 12, line 40);

- flowing the first plasma generating current across the processing region and through another end of the first hollow member to define a first closed plasma current path (Col. 12, Line 45);

- flowing a process gas through a showerhead into the processing region and forming a plasma of the process gas adjacent a substrate using the first plasma of the first gas (Col. 10, Line 50);

- shaping the first and second plasma shaping apparatus located adjacent each end of the first hollow member (Col. 14, Line 39);

- adjusting the geometry (via shape) of at least one of the first and second plasma shaping apparatus during processing (Col. 13, Line 48).

Regarding claims 46-48 and 56-59, Hanawa disclose that the (first and second) process gas are the same comprises at least one of Argon (Ar) (Col. 10, Line 25), a deposition gas (Col. 9, Line 27).

Regarding claim 50, Hanawa disclose that the first gas throught an opening defines by each of the respective plasma shaping apparatus, wherein each opening defines geometrically differently shaped regions (Col. 5, Line 27).

Regarding claim 51, Hanawa disclose that adjusting the geometry of the plasma-shaping apparatuses (Col. 3, Line 54) comprises a magnet (1870 (Col. 13, Line 27).

Regarding claim 52, Hanawa disclose that changing one or more of the plasma shaping apparatuses with one or more plasma shaping apparatuses having different geometrically shaped regions (Col. 5, Line27).

Regarding claim 53, Hanawa disclose that opening is registered with an outlet of the external plasma source and wherein the plasma shape opening defines a first portion and a second portion, wherein the second portion is narrower than the first portion (Col. 16, Line 41) (Fig. 35).

Regarding claim 54, Hanawa disclose flowing a second gas in a second plasma current path defined by a second hollow member located external to the processing region (Col. 12, Line 36).

Regarding claim 55, Hanawa disclose that applying RF power to a second antenna in order to inductively couple energy into the second plasma current path and generating a second plasma from the second gas (Col. 12, Line 36).

Regarding claim 60, Hanawa disclose that flowing the second plasma current adjacent a third plasma shaping apparatus adjacent one end of the second hollow member, and flowing a second plasma current across the processing region and adjacent a fourth plasma shaping apparatus located adjacent another end of the second hollow member to define a second closed plasma current path (Col. 3, line 29).

Regarding claim 61, Hanawa disclose that flowing the first gas and second gas adjacent each of the respective plasma shaping apparatuses comprises flowing the gases through an opening defined by each of the respective plasma shaping apparatuses, wherein each opening defines geometrically differently shaped regions (Col. 3, Line 24) (Fig. 41).

Regarding claim 62, Hanawa disclose adjusting the geometry of the plasma-shaping apparatuses (Col. 8, Line 54).

Regarding claim 63, Hanawa disclose that exchanging one or more of the plasma-shaping apparatuses with one or more plasma shaping apparatuses having different geometrically shaped regions (Col. 6, Line 5).

Regarding claim 64, Hanawa disclose that the opening is registered with an outlet of the external plasma source and wherein the plasma shape opening defines a first portion and a second portion, wherein the second portion is narrower than the first portion (Col. 16, Line 20).

Regarding claim 65, Hanawa disclose that the plasma shaping apparatus is a magnetic plasma shaping apparatus (Col. 16, Line 20).

Regarding claim 66, Hanawa disclose that the plasma-shaping apparatus comprises at least one magnetic field within the opening to shape the plasma within the first plasma current path (Col. 16, Line 20).

Regarding claim 67, Hanawa disclose changing the magnetic field during a process or between sequential processes to shape the plasma (Col. 16, Line 20).

Regarding claim 68, Hanawa disclose that the plasma shaping apparatus includes at least one magnetic element and wherein changing the magnetic field comprises adjusting the at least one magnetic element (Col. 15, Line 9).

Regarding claim 69, Hanawa disclose that adjusting the magnetic element comprises positioning the magnetic element closer to or further from the plasma (Col. 15, Line 9).

Regarding claim 70, Hanawa disclose that the magnetic element is an electromagnet coupled to a current source to induce a magnetic field and wherein adjusting the magnetic element comprises adjusting the current source to increase or decrease the magnetic field (Col. 15, Line 9).

Regarding claim 71, Hanawa disclose that a second plasma source (2420) disposed on the chamber (100)(Fig. 24), and overlapping the first plasma source (1850) (Fig. 24), wherein the second plasma source (2420) defines a second plasma path (Col. 14, Line 4).

Regarding claims 72 and 73, Hanawa disclose that the first and second plasma source (1850&2420) define as an outlet with respective opening formed insides of the body (100) (Fig. 24&25) (Col. 13, Line 62) (Col. 14, Line 1).

Regarding claim 74, Hanawa disclose a plasma shaping apparatus comprising:

- a body including an inner surface defining an opening to allow plasma therethrough (Col. 13, Line 12) (Fig. 18), and at least one magnetic element (170) (Fig. 18) (Col. 6, Line 12) disposed adjacent the opening (1860) is configured to shape the plasma flowing (Col. 13, Line 15).

- Regarding claim 75, Hanawa disclose that the magnetic element comprises electromagnets (Col. 6, Line 11).

Regarding claim 76, Hanawa disclose an apparatus for substrate processing comprising:

- a chamber (100) comprising a bottom, a top and a body dispose between the top and bottom (Fig. 1); and

- at least one plasma source dispose on the chamber (Fig. 1), wherein the plasma source comprising:

- a hollow conduit (150); and

- a plasma shaping apparatus at each end of the hollow conduit (155&160) (Col. 5, Line 17), wherein the cross sectional area of the plasma shaping apparatus is wider than the cross sectional area of the hollow conduit (Fig. 17A), wherein the plasma shaping apparatus defines an opening to allow plasma flow to the chamber (Col. 18, Line 18), wherein the cross sectional area of the central portion of the opening is wider than the cross sectional are of the outer portions of the opening (Col. 16, Line 26) (Fig. 17A).

Regarding claim 77, Hanawa disclose an apparatus for substrate processing comprising:

- a chamber (100) comprising a bottom, a top and a body dispose between the top and bottom (Fig. 1); and

- at least one plasma source dispose on the chamber (Fig. 1), wherein the plasma source comprising:

- a hollow conduit (150) (Fig. 1); and

- a plasma shaping apparatus at each end of the hollow conduit (155&160) (Col. 5, Line 17), wherein the cross sectional area of the plasma shaping apparatus is wider than the cross sectional area of the hollow conduit (Fig. 17A), wherein the plasma shaping apparatus defines an opening to allow plasma flow to the chamber (Col. 18, Line 18), wherein the cross sectional area of the central portion of the opening is narrower than the cross sectional are of the outer portions of the opening (Fig. 43) (Col. 16, Line 20) (Fig. 20).

Regarding claim 78, Hanawa disclose that the narrow center cross sectional area force the plasma to flow through the outer cross sectional area of the opening (Col. 16, Line 22).

Regarding claim 79, Hanawa disclose an apparatus for substrate processing comprising:

- a chamber (100) comprising a bottom, a top and a body dispose between the top and bottom (Fig. 1); and

- at least one plasma source dispose on the chamber (Fig. 1), wherein the plasma source comprising:

- a hollow conduit (150) (Fig. 1); and

- a plasma shaping apparatus at each end of the hollow conduit (155&160) (Col. 5, Line 17), wherein the cross sectional area of the plasma shaping apparatus is wider than the cross sectional area of the hollow conduit (Fig. 17A), wherein the plasma shaping apparatus defines an opening to allow plasma flow to the chamber (Col. 18, Line 18), wherein the opening comprises a central portion configured to constrict the flow of plasma through the central and outer portions (Col. 13, Line 27).

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the

mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D Tran whose telephone number is (703)306-5984. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (703)308-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

TC
April 16, 2004

Wilson Lee
Primary Examiner